

REMARKS

In accordance with the foregoing, claims 1, 2, and 19 have been amended, claims 3-7 and 9-18 have been cancelled without prejudice or disclaimer, and claims 1, 2, 8, and 19 are pending and under consideration. No new matter is presented in this Amendment.

DOUBLE PATENTING REJECTIONS:

Claims 1, 2, 8, and 16-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3-6 of copending Application No. 11/265,131. In addition, claims 1, 2, 8, and 16-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 and 9-10 of copending Application No. 11/280,463.

A terminal disclaimer has been filed herewith, disclaiming the terminal part of the statutory term of any patent, granted on the above-identified application, which would extend beyond the expiration date of any patents granted on U.S. Patent Applications Nos. 11/265,131 and 11/280,463. Therefore, this rejection has been respectfully traversed. Reconsideration and withdrawal are respectfully requested.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 1, 2, and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kozu. In particular, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to relocate the protection circuit board of Kozu to a location, such as the one recited in independent claim 1, because rearranging parts involves only routine skill in the art (design choices). In addition, the Examiner has asserted that Applicants have not provided any evidence of unexpected results, due to the presently claimed relocation of the protective circuit board.

In order to even more particularly point out the aspects of the present invention, claim 1 has been amended to recite the limitations of claim 16, and claim 2 has been amended to recite the limitations of claims 17 and 18. In addition, claims 16-18 have been canceled without prejudice or disclaimer. Finally claim 19 has been amended to depend from claim 1. Therefore, the rejection of claims 1, 2, and 19 will be mainly addressed below, with respect to the rejections of claims 16-18.

With regard to the Examiner's assertion that Kozu teaches electrode tabs being bent only once, Applicants again respectfully point out that the Fig. 9A is not an embodiment of the

completed pouch-type battery, but is rather an intermediate step, and therefore, to form a pouch-type battery, it is necessary to bend the electrode tabs 12, once again, as illustrated in Fig. 9B. Furthermore, Applicants note that Fig. 9A cannot be relied upon for a teaching of the tabs being bent only once since such proposed modification would render the battery inoperable, since in such position the battery cannot be sealed. As noted in MPEP 2143.01, "If [a] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Accordingly, Applicants respectfully assert that there is no motivation to modify the battery pack taught by Koizu, to maintain the electrode tabs in an upright position.

Furthermore, even if the battery pack illustrated in Fig. 9A were an operable battery and thus, taught the electrode tabs being bent only once, it is noted that Fig. 9A clearly illustrates the electrode tabs extending beyond the thickness of the case. Contrary to Koizu, amended claim 1 recites that the tabs are bent only once and do not extend beyond the thickness of the case.

Therefore, Applicants respectfully assert that Koizu fails to teach or suggest, at least, the electrode tabs being bent only once at a substantially right angle with respect to a plane of the sealing surface, without extending beyond a thickness of the case forming the pouch-type lithium secondary battery.

In addition, with regard to the Examiner's arguments that the differences between the rejected claims and the Koizu are merely design choices, and that there is no criticality found for these differences, Applicants respectfully assert that paragraphs [0052]-[0054] of the present specification recite that the structure of the electrode terminals and the location of the protection circuit board allow for an area of the sealing surface of the case to be minimized, an internal area of the case to be increased, and the capacity of a battery unit accommodated inside the case to be increased. Therefore, the Examiner's assertion that there is no evidence for unexpected results due to the location of the protective circuit board fails to account for the disclosure of the present specification.

Claims 16-18 are rejected under 35 U.S.C. §103(a), as being unpatentable over Koizu (U.S. Patent No. 6,451,474), in view of Masumoto (WO 03/003485 English equivalent 6,861,821). In particular, the Examiner argues that Fig. 9A of Koizu teaches electrode tabs that connect to the protection circuit board and extend outside the case, while being bent only once at a substantially right angle with respect to a plane of the sealing surface. The Examiner also argues that Masumoto remedies the admitted deficit of Koizu, namely that the tabs do not extend

beyond a thickness of the case. For the following reasons, applicants respectfully disagree.

Even if one of skill in the art would have been motivated to apply the electrodes of Masumoto to the battery of Kozu, the combination still fails to teach or disclose the tabs of amended claim 1. In particular, amended claim 1 recites that the electrode tabs extend from the positive and negative electrode plates, through the case, and are then bent only once at a substantially right angle, with respect to a plane of the sealing surface, without extending beyond a thickness of the case. In addition, amended claim 1 recites that the protection circuit board is directly electrically connected to the positive and negative electrode plates, via the electrode tabs.

As shown in Fig. 5A of Masumoto, positive and negative lead plates 108, 109 are used to connect a terminal plate 102 to a plain battery 101. In particular, at col. 11, lines 23-33, Masumoto recites that the positive lead plate 108 is connected to a sealing plate 23, while the negative lead plate 109 is bonded to a PTC element 110.

Therefore, the lead plates 108, 109 do not extend from positive and negative electrode plates, as the lead plates are not taught to contact electrode plates. In addition, the lead plates 108, 109 do not extend through a case housing the electrode plates, as the lead plates are disposed outside of the case of the plain battery 101. Furthermore, Fig. 5A does not illustrate a completed battery, but is instead an intermediate step showing a can-type battery, rather than a pouch-type battery. The pouch-type battery being formed only after bending the lead plates 108 and 109, as shown in Fig. 5B.

Furthermore, the present Specification recites that the protection circuit board includes a safety element, such as a PCT element. Accordingly, the only element of Masumoto that could arguably anticipate the protective circuit board is the PCT element 110, not in the terminal plate 102. In addition, as shown in Figs. 3A and 3B, Masumoto teaches that the PCT element 110 is electrically connected to the plain battery, via a rivet 25 and the sealing plate 23, rather than being directly electrically connected to electrode plates, via electrode tabs, as recited in present claim 1.

Therefore, the lead plates 108, 109 cannot be said to anticipate the presently claimed electrode tabs, because the lead plates 108, 109: (1) do not extend from positive and negative electrode plates; (2) do not extend through a case; and (3) do not directly connect a protection circuit board to electrode plates. Accordingly, even if one of skill in the art would have been motivated to apply the lead plates 108, 109 to the battery of Kozu, the combination would not anticipate present claim 1.

Therefore, this rejection has been respectfully traversed. Reconsideration and withdrawal are respectfully requested.

Claim 8 is rejected under 35 U.S.C. §103(a), as being unpatentable over Kozy, in view of Applicants' Admitted Prior Art (AAPA). In particular, the Examiner asserts that the AAPR teaches insulating tape that is admittedly not taught in Kozy.

For at least the reasons recited above, Applicants respectfully assert that this combination fails to anticipate all elements of amended claim 1. Therefore, this rejection has been respectfully traversed. Reconsideration and withdrawal are respectfully requested.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN MCEWEN, LLP

Date: 5/12/2009

By: M. T. Gill

Matthew T. Gill
Registration No. 48,490

1400 Eye St., NW
Suite 300
Washington, D.C. 20005
Telephone: (202) 216-9505
Facsimile: (202) 216-9510